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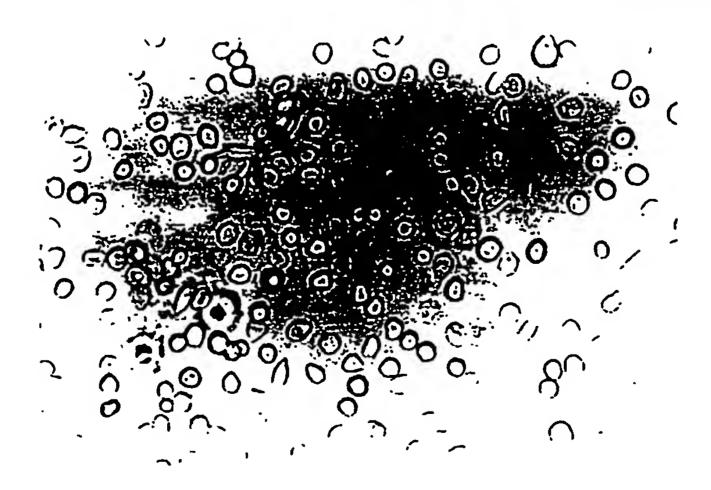
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(54) Title: METHODS OF ISOLATION, CRYOPRESERVATION, AND THERAPEUTIC USE OF HUMAN AMNIOTIC EP-ITHELIAL CELLS



Human amniotic epithelial cells just after isolation from amnion.

(57) Abstract: The present invention is directed to human amniotic epithelial cells derived from placenta at delivery, and the methods for isolating, culturing, and cryopreserving them for future therapeutic uses. Additionally, the present invention is directed to methods for inducing differentiation of these multipotentials cells, for assaying the cell types derived, and for manipulating the cells by gene transfection and other means for therapeutic applications, icluding but not limited to enzyme replacement and gene therapy, tissue regeneration and replacement, as well as burn and wound dressings.

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12N5/06 C12N15/67 A61K48/00 A61K35/50 A61F2/00 A61L27/00 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) C12N A61K IPC 7 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ, BIOSIS C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No. Citation of document, with indication, where appropriate, of the relevant passages 1-7,61, EP 0 333 328 A (GENETHICS LTD) X 20 September 1989 (1989-09-20) 62,66 cited in the application column 9, line 44 -column 12, line 2 column 24, line 35 -column 25, line 12; examples 1,2 WO 98 37903 A (TSENG SCHEFFER C G) 1,17,18, X 3 September 1998 (1998-09-03) 21,60-62 page 3, line 20 -page 9, line 12 EP 0 815 867 A (SRL INC) 1,2,5-7, 7 January 1998 (1998-01-07) 54,57 abstract column 2, line 9-35 column 4, line 9-14 column 5, line 44-54; example 1 Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents: "I" later document published after the international filing date or priority date and not in conflict with the application but *A* document defining the general state of the art which is not cited to understand the principle or theory underlying the considered to be of particular relevance "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention filing date cannot be considered novel or cannot be considered to involve an inventive step, when the document is taken alone "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another "Y" document of particular relevance; the claimed invention citation or other special reason (as specified) cannot be considered to involve an inventive step when the *O* document referring to an oral disclosure, use, exhibition or document is combined with one or more other, such documents, such combination being obvious to a person skilled other means in the art. *P* document published prior to the international filing date but *&* document member of the same patent family later than the priority date claimed Date of the actual completion of the international search Date of mailing of the International search report 13/12/2000 29 November 2000 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl. Mateo Rosell, A.M. Fax: (+31-70) 340-3016

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